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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,260	07/31/2003	Robert J. Kildea	F-7955 (02-719)	5507
34704	7590	08/10/2004	EXAMINER	
BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510			EVANS, GEOFFREY S	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/632,260

Applicant(s)

KILDEA, ROBERT J.

Examiner

Geoffrey S Evans

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. The abstract of the disclosure is objected to because it does not contain that which is new (the electrode shape) since a two-step process is already well known (e.g. see U.S. Patent No. 4,762,464). Please also note that legal phraseology (e.g. the word "wherein") should not be used in the abstract. Correction is required. See MPEP § 608.01(b).
2. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 11 the language "comprising an additional angle portion" is unclear since a first angle portion is not recited. Please also indicate in the REMARKS of your response the places in the specification that support the limitation "additional angle portion" for clarity.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
4. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Baker in U.S. Patent No. 4,850,147. Baker in figure 4c has an electrode with a nose extending to a point along a theoretical centerline, the nose being "capable" of forming a transition line.
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vertz et al. in U.S. Patent No. 4,762,464 in view of Baker in U.S. Patent No. 4,850,147. Vertz et al. discloses using a two-step process of forming a metering hole and fabricating a diffuser hole. Vertz et al. does not disclose using an electrode comb comprising a tooth comprising a nose comprised of a plurality of diffuser surfaces intersecting at a point on the centerline, and at least one of the said plurality of diffuser surfaces truncated by an offset from the centerline. Baker teaches an electrode comb comprising a tooth comprising a nose comprised of a plurality of diffuser surfaces intersecting at a point on the centerline, and all of the said plurality of diffuser surfaces are truncated by an offset from the centerline, and that such an electrode does not create a stepped bore when machining a hole. It would have been obvious to adapt Vertz in view of Baker to provide this to prevent creation of a stepped bore.

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vertz in view of Baker as applied to claims 8 and 9 above, and further in view of Cross et al. in U.S. Patent No. 4,922,076. Cross et al. teaches a diffuser angle portion of 2-10 degrees (which of course includes 10 degrees) as being preferable (see column 6, lines 5-12) for an electrode used to create holes in a blade of a jet engine. It would have been obvious to adapt Vertz in view of Baker and Cross et al. to provide this to optimize air flow through a blade of a jet engine.

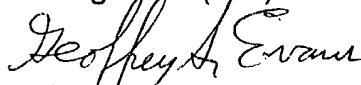
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8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vertz et al. in U.S. Patent No. 4,808,785 uses a two-step process for forming cooling holes in an airfoil. Field in U.S. Patent No. 4,650,949 has an electrode of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S Evans whose telephone number is (571)-272-1174. The examiner can normally be reached on Mon-Fri 6:30AM to 4:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571)-272-1171. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9306.

GSE

  
Geoffrey S. Evans  
Primary Examiner  
Group 1700